HotZone

September 10, 2012

## In this Issue



## Upcoming Hazus User Group Calls

**User Group calls:**

September 18
October 16
November 13
December 11

**Leaders calls:**

September 11
November 6
January 8

More information on the User Group calls can be received by signing up for GovDelivery emails.

# Developing New Earthquake Scenarios for Israel Using Hazus-MH 2.1

In preparation for Israel's national level earthquake exercise in October 2012, the Geological Survey of Israel (GSI) worked with FEMA to implement the Hazus earthquake model. Israel is situated along the tectonically active Dead Sea Transform (DST) experiencing magnitude 6-7 earthquakes with recurrence time of hundreds to thousands years. Worldwide, mitigation of future earthquake damage, improving of population survival, and evaluation of expected earthquake effects is done using modern earthquake loss estimation computer techniques.

Consequently these techniques have become common and are widely used to quantify potential, social, and economic losses from earthquakes. In Israel preliminary damage and loss estimation scenarios were developed using Hazus. The studied area is divided into census tracts, each hosting populations of ~2,500, and including data records of medical care stations, emergency facilities, central bus stations, railway bridges, ports, airport facilities, drinking-water and sewage facilities and fuel farms.

In addition, information regarding geology, topography, location of the active faults, historical earthquake epicenters, demographic and economic exposure were implemented into the Hazus databases.

Over 2,200 different building construction schemes were built for each scenario, based on age, height, type of construction and occupancy. A landslide susceptibility map was developed and incorporated into the Hazus data-base as well.

Two synthetic earthquakes were simulated, both Mw=7.0 events with a focal depth of 10 km and were modeled using the latest NGA (Next Generation Attenuation) functions and a detailed soil amplification map using both Hazus and the USGS ShakeMap program.

The results of the simulations show excellent ability of Hazus to resolve the expected different damage levels and loss for various types of buildings and infrastructures for each specific census tract in Israel, as well as locate sites of expected landslides. The loss information provides decision-makers and emergency authorities a tool for planning and exercising emergency actions following an earthquake including search and rescue, debris clearance, building inspection and sheltering requirements.

For more information, contact Doug Bausch at Douglas.Bausch@fema.dhs.gov.

# Request Training in Your Community

Regions or states have the option to request local, in-person training courses. If there is an EMI course that your community is interested in, you can work with your State Training Officer to request approval of a "field course." Once green-lit, the local community finds an EMI-certified instructor to conduct the training.

The steps to request a "field course" are as follows:

**1**. The local community, or requestor, discusses the course details with the State Training Officer

**2**. The State Training Officer requests approval and assistance from the FEMA Regional Training Officer, or can approve funding at the State or local level

**3**. The FEMA Regional Training Officer submits a formal request for training to EMI, who has the final approval

**4**. An EMI-certified instructor conducts the course

**5**. Once the training is completed, EMI will record the training and issue a certificate of completion

To receive a certificate, the instructor collects the FEMA form119-25-1 and mails them to EMI.

Please email Phillip.Moore2@fema.dhs.gov for more information.

## 2012 EMI Training Courses

E296: Application of Hazus-MH for Risk Assessment
September 17 - 20

E190: ArcGIS for Emergency Managers
Oct 29 - Nov 1

E313: Basic Hazus-MH
November 5 - 8

To download the course schedule and enroll, visit http://training.fema.gov/EMICourses/

## Contact Us


**Hazus Outreach Team**
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**Hazus Program Manager**
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**Hazus Help Desk**
https://support.hazus.us/


Join the Hazus Group on LinkedIn!

Follow us on Twitter! @HazusCommunity

Scan here with your smartphone for more information

# Hazus Regional POC Meeting

Last month, Hazus representatives from 9 out of the 10 FEMA Regions convened in Philadelphia for the Hazus Regional POC Meeting.

The meeting was interactive and covered a breadth of topics. The objectives of the meeting were to get regional input on the Hazus program, discuss in detail the draft Hazus Business Plan, and how Hazus is being integrated within Regional operations.

Other topics included Average Annualized Loss (AAL) data, training opportunities, upcoming software upgrades, and outreach efforts.

Each Regional POC gave an update on how their region is using Hazus, success stories, challenges with Hazus, and valuable insight and feedback for the Hazus Business plan. A discussion on AAL data produced recommendations around accessibility issues and who should act as the steward of AAL information in the future.

FEMA hopes to continue this as an annual event that will give Hazus Regional representatives a platform to discuss their use of Hazus and future directions of the program.

## Did You Know?

FEMA's website has **61** Hazus pages

Visitors come to the site from around the word. In July 2012, the top three foreign countries that accessed Hazus pages were:

**Germany – 111 visits**
**India – 69 visits**
**UK – 58 visits**

In July 2012, visitors mainly found the Hazus website through:

**Google – 2,208**
**Direct Link – 439**
**Bing – 281**
**Yahoo – 101**

# Regional Training Spotlight

## Exploring the Applications of Hazus-MH for Flood and Earthquake Loss Impact Assessment

**Description:**
This workshop will introduce Hazus-MH features through multiple hands-on exercises. Participants will explore realistic examples of Hazus-MH models based on western US hazards. They will also be introduced to the many options that users have for integrating improved hazard data as well as data that describes buildings, populations, and infrastructure in order to enhance the quality of modeling outputs. This workshop will be of interest to anyone working in or supporting emergency management activities.

**Learning Objectives:**
1. List the goals and capabilities of Hazus-MH
2. Be able to perform a basic Hazus-MH analysis for earthquake and flood hazards
3. Be able to list available resources for expanding knowledge of Hazus-MH capabilities and applications

**Location:** Loma Linda University GIS Labs, Centennial Complex, Rooms 3110, 3102, Loma Linda, CA
**Date/Time:** Sunday, September 30, 2012. 8:30 am to 4:30 pm PST
**Cost:** Free for those registered to attend the Healthy Communities by Design Summit (http://www.llu.edu/public-health/hcbd/2012/). Otherwise, $25 for those unregistered for the Summit to cover printed materials and other administrative cost for the Workshop.

**To register, contact Seth Wiafe at swiafe@llu.edu.**